






Anti-Human HLA-DR (GRB-1)

			
BULK	HLADRP-U	1 mg	
FITC	HLADRF-100T	100 test	
PE	HLADRPE-100T	100 test	
APC	HLADRA-100T	100 test	

1. PRODUCT DESCRIPTION

- **Clone:** GRB-1;
- **Isotype:** IgG1;
- **Tested application:** flow cytometry;
- **Immunogen:** The anti-HLA-DR monoclonal antibody derives from mononuclear cell leukemia acute undifferentiated;
- **Species reactivity:** Human;
- **Storage instruction:** store in the dark at 2-8 °C;
- **Storage buffer:** aqueous buffered solution containing protein stabilizer and 0.09% sodium azide (NaN₃);
- **Recommended usage:** Immunostep's HLA-DR, clone GRB-1, is a monoclonal antibody intended for the identification and enumeration of all human B cells, monocytes and activated T cells using flow cytometry. This reagent is effective for direct immunofluorescence staining of human tissue for flow cytometric analysis using 1 test for 10⁶ cells;
- **Presentation:** liquid;
- **Source:** Supernatant proceeding from an in vitro cell culture of a cell hybridoma;
- **Purification:** Affinity chromatography;
- **Other names:** Major Histocompatibility Class II, MHC class II;
- **Gene ID:** 3122;
- **Molecular weight:** 36 kDa.

2. ANTIGEN DETAILS

Large description: This antibody reacts with the HLA-DR-antigen of human B lymphocytes. The antibody reacts with the cells of the monocytic lineage, with myeloblasts and promyelocytes and the cells of B lymphocyte lineage. Polymorphonuclear leukocytes and platelets are found negative⁽¹⁻⁶⁾.

3. WARRANTY

Warranted only to conform to the quantity and contents stated on the label or in the product labelling at the time of delivery to the customer. Immunostep disclaims hereby other warranties.

Immunostep's sole liability is limited to either the replacement of the products or refund of the purchase price.

4. ADDITIONAL INFORMATION

For research use only. Not for diagnostic use.

Not for resale. Immunostep will not be responsible of violations that may occur with the use of this product. Any use of this product other than the specified in this document is strictly prohibited.







Unless otherwise indicated by Immunostep by written authorization, this product is intended for research only and is not to be used for any other purpose, including without limitation, for human or animal diagnostic, therapeutic or commercial purposes.

Please, refer to www.immunostep.com technical support for more information.

5. REFERENCES

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2. Polakova K, Karpatova M. Study of monomorphic determinants on DR molecules of HLA class II antigens. *Neoplasma*1990;37(3):239-51.
3. Sedlak J, Chorvath B. Fluorescent double labeling of normal and malignant hematopoietic cells by monoclonal antibodies (FITC) and anthracycline cytostatic drug (Daunomycin): a cytometric technique for analysis of drug uptake in hematopoietic cell subpopulations. *Neoplasma*1991;38(1):13-20.
4. Dusinsky R, Simon M, Ujhazyova J, Polakova K. [Use of monoclonal antibodies against human HLA II antigens for the detection of bovine B lymphocytes and macrophages]. *Vet Med (Praha)*1992 Sep-Oct;37(9-10):549-54.
5. Mendez R, Serrano A, Jager E, Maleno I, Ruiz-Cabello F, Knuth A, et al. Analysis of HLA class I expression in different metastases from two melanoma patients undergoing peptide immunotherapy. *Tissue Antigens*2001 Jun;57(6):508-19.
6. Paco L, Garcia-Lora AM, Casares C, Cabrera C, Algarra I, Collado A, et al. Total loss of HLA class I expression on a melanoma cell line after growth in nude mice in absence of autologous antitumor immune response. *Int J Cancer*2007 Nov 01;121(9):2023-30.

6. EXPLANATION OF SYMBOLS

	Fluorochrome
	Product reference
	Content for <n> analysis
	Regulatory Status
	Research Use Only
	Manufacturer

7. MANUFACTURED BY:

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